

RANGE EXTENSIONS AND NEW RECORDS FOR THE BAHAMA FLORA

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In recent years the flora of the Bahama Islands has again aroused the interest of several taxonomists, who have found *The Bahama Flora* of N. L. Britton and C. F. Millspaugh (1920) to be inadequate in many respects. Not only have numerous nomenclatural changes been proposed, but also since that time collections of species new to the islands have been made (Howard, 1950; Howard & Dunbar, 1964; Lewis, 1971). At the present time The Fairchild Tropical Garden is undertaking the much-needed revision of the outdated work.

This writer has made two collecting trips to the Bahamas; the first from April 28 to May 16, 1970, on New Providence Island, Long Island, and Inagua Island, and the second from May 18 to June 3, 1972, on Long Island alone. Both trips were as an undergraduate at Bates College, Lewiston, Maine, and were under the guidance and direction of Dr. Harold E. Hackett of the Department of Biology at that institution. Four collections were from New Providence, 147 from Long Island, and 51 from Inagua. It was noted that the flora of Long Island, a flora which seems to resemble that of the eastern coast of Cuba, was particularly poorly known. Long Island is an "out island" nearly one-hundred miles long and four miles wide, trending north-south, and bisected by the Tropic of Cancer. Since the flora was poorly known, Walter Cerbin, SSJ, of Clarence Town, Long Island agreed to collect in his area, with the processing of specimens to be done at the New York Botanical Garden. To date Father Cerbin's collections number 76 (nos. 102-167 from Long Island, and 1001-1010 from Inagua). These are deposited in this writer's personal herbarium (designated as SRH) housed at the New York Botanical Garden, with duplicates at New York and the Arnold Arboretum.

According to Britton and Millspaugh (1920), five collectors had gathered specimens on Long Island up to the time of their work, and of their collections only 173 numbers were cited (nos. 495-520, 524 of William C. Coker, 1903; and nos. 6225-6307 of Britton and Millspaugh, 1907). The two others considered to have collected on the island were Swainson (1830-42), whose collections were not known to the authors of *The Bahama Flora*, and H. F. A. von Eggers (1888), whose collections were apparently not sufficiently well-known to be cited. Among those who have touched upon Long Island since that time are Dr. Harold E. Hackett of Bates College (53 numbers in the Duke University Herbarium), Father Walter Cerbin, and this writer.

The results of the recent collections include several new records: 49 species newly reported for Long Island, 4 new to Inagua, and 8 new to the Bahama Islands. The collections also include the rediscovery of a species formerly known only from the type, *Zamia lucayana* Britton. It is interesting to note that many of these new records are of rather common species in the West Indies, reflecting the paucity of the collections from the area to date. Cultivated plants have been included since they commonly escape on the islands and become a part of the local flora.

The list of taxa is divided into four sections: 1) species newly reported for Long Island, 2) species newly reported for Inagua, 3) species newly reported for the Bahamas, and 4) a rediscovery. The citations after the collection number refer to those institutions in which the specimen is housed, and the abbreviations are as in the *Index Herbariorum* (Lanjouw and Stafleu, 1964).

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I. Species Newly Reported for Long Island.

A. Native or long established species.

POLYPODIACEAE: *Acrostichum danaeifolium* Langsd. & Fisch.: Hill 840 (SRH) sinkhole, Village Road, S. Clarence Town.

Asplenium dentatum L.: Hill 834 (A, SRH) sinkhole, Deadman's Cay.

Pteris longifolia L.: Hill 819b (SRH) moist depression, Mangrove Bush.

Thelypteris normalis (C. Chr.) Moxley: Hill 125, 835 (SRH) sinkholes, Village Road, S. Clarence Town.

GRAMINEAE: *Chloris petraea* Sw.: Hill 467 (SRH) Clarence Town. Det. G. Davidse.

Distichlis spicata (L.) Greene: Hill 123 (A, SRH) Harbor Point, Clarence Town. Det. A. Holmgren.

Uniola paniculata L.: Hill 826 (A, SRH) Harbor Point, Clarence Town.

AMARYLLIDACEAE: *Agave sisalana* (Engelm.) Perrine: Hill 824 (SRH) Clarence Town.

Hymenocallis declinata (Jacq.) M. Roem.: Hill 829 (A, SRH) Turtle Cove.

BROMELIACEAE: *Tillandsia usneoides* L.: Hill 670b (US, A, SRH) Galloway's Cave, South Clarence Town.

Tillandsia utriculata L.: Hill 529 (SRH) Village Rd., S. Clarence Town.

COMMELINACEAE: *Rhoeo spathacea* (Sw.) Stearn: Hill 244 (SRH) Clarence Town.

ORCHIDACEAE: *Encyclia bahamensis* (Griseb.) Britton: Hill 532 (US, A, SRH) 4 mi. W. of Clarence Town.

POLYGONACEAE: *Antigonum leptopus* H. & A.: Cerbin 120 (NY, A, SRH) Clarence Town.

Coccoloba swartzii Meisner: Hill 471, 841 (SRH) Clarence Town.

NYCTAGINACEAE: *Commicarpus scandens* (L.) Standley: Cerbin 104 (NY, A, SRH) Turtle Cove.

Guapira bracei (Britt.) Little: *Hill* 848 (SRH) Turtle Cove.

BATIDACEAE: *Batis maritima* L.: *Hill* 531 (SRH) Clarence Town.

MIMOSACEAE: *Acacia farnesiana* (L.) Willd.: *Cerbin* 144 (NY, A, SRH) Village Road, South Clarence Town.

Albizia lebeck (L.) Benth.: *Hill* 540 (SRH) Clarence Town.

CAESALPINIACEAE: *Cassia biflora* L.: *Cerbin* 116 (NY, A, SRH).

ZYGOPHYLLACEAE: *Kallstroemia maxima* (L.) T. & G.: *Hill* 952 (SRH) Clarence Town.

EUPHORBIACEAE: *Pedilanthus tithymaloides* (L.) Poit.: *Hill* 139 (SRH); *Cerbin* 139 (NY, A, SRH) Clarence Town.

Ricinus communis L.: *Hill* 542 (SRH) common escape in Clarence Town.

MALVACEAE: *Abutilon trisulcatum* (Jacq.) Urban: *Cerbin* 160 (NY, A, SRH) Clarence Town.

Cienfuegosia yucatanensis Millspaugh: *Hill* 1015 (SRH) moist depression between Hamilton's and Buckley's. Identified by Dr. Paul Fryxell.

Thespesia populnea (L.) Soland.: *Hill* 129 (A, SRH) Clarence Town.

TURNERACEAE: *Turnera diffusa* Willd.: *Hill* 845 (SRH) Harbor Point, Clarence Town.

PASSIFLORACEAE: *Passiflora bahamensis* Britton: *Hill* 515b (A, SRH); *Cerbin* 166 (NY, A, SRH) Clarence Town.

CARICACEAE: *Carica papaya* L.: *Hill* 142 (A, SRH) occasional in Clarence Town.

SAPOTACEAE: *Mastichodendron foetidissimum* (Jacq.) Cronq.: *Hill* 839 (A, SRH) Turtle Cove.

APOCYNACEAE: *Plumeria obtusa* L.: *Hill* 831 (SRH) Turtle Cove.

ASCLEPIADACEAE: *Cryptostegia grandiflora* (Roxb.)

R. Br.: *Hill* 128 (SRH); *Cerbin* 153 (NY, SRH)
Clarence Town outskirts.

CONVOLVULACEAE: *Evolvulus squamosus* Britton:
Cerbin 113 (NY, A, SRH) Mangrove Bush.

Merremia dissecta (Jacq.) Hall: *Cerbin* 117 (NY,
A, SRH) Morrisville.

SCROPHULARIACEAE: *Stemodia maritima* L.: *Hill* 947
(SRH); *Cerbin* 119 (NY, A, SRH) 4 miles west of
Clarence Town. Determined by Dr. Noel Holmgren.

ACANTHACEAE: *Blechum brownei* Juss.: *Cerbin* 126
(A, NY, SRH) Clements.

Ruellia tuberosa L.: *Hill* 846 (SRH) Clarence
Town.

RUBIACEAE: *Casasia clusiifolia* (Jacq.) Hitch.: *Cer-*
bin 141, 152 (NY, A, SRH) Salt Pond.

ASTERACEAE: *Bidens pilosa* L.: *Cerbin* 111 (NY, A,
SRH) Mangrove Bush.

Wedelia trilobata (L.) Hitchc.: *Cerbin* 136 (NY,
A, SRH) Salt Pond.

Verbesina encelioides (Cav.) Benth. & Hook.:
Cerbin 159 (NY, A, SRH) Clarence Town. Deter-
mined by K. Becker.

B. Cultivated or escaped.

AMARYLLIDACEAE: *Hippeastrum puniceum* (Lam.)
Urban: *Hill* 1017 (SRH) Hamiltons.

FABACEAE: *Sesbania grandiflora* (L.) Pers.: *Cerbin*
102 (NY, A, SRH) Turtle Cove.

EUPHORBIACEAE: *Codiaeum variegatum* (L.) Blume:
Cerbin 122 (NY, A, SRH) Clarence Town.

ARALIACEAE: *Polyscias guilfoylei* (Bull.) Bailey:
Cerbin 114 (NY, A, SRH) Morrisville.

APOCYNACEAE: *Thevetia peruviana* (Pers.) K.
Schum.: *Hill* (A, SRH) Clarence Town.

OLEACEAE: *Jasminum fluminense* Vell.: *Cerbin* 140
(NY, A, SRH) Salt Pond.

SCROPHULARIACEAE: *Russelia equisetiformis* Schl.
& Cham.: *Cerbin* 133 (NY, A, SRH) Deadman's Cay.

CUCURBITACEAE: *Momordica charantia* L.: *Cerbin* 125 (NY, A, SRH) Clements.

II. Species Newly Reported for Inagua.

LILIACEAE: *Sansevieria hyacinthoides* (L.) Druce: *Cerbin* 1001 (NY, A, SRH) Along road to Northwest Point.

PASSIFLORACEAE: *Passiflora bahamensis* Britton: *Hill* 515 (SRH) Union Creek.

APOCYNACEAE: *Nerium oleander* L.: *Hill* 488a & b. (SRH) Matthew Town.

CONVOLVULACEAE: *Merremia dissecta* (Jacq.) Hall: *Hill* 489 (SRH) Matthew Town.

III. Species Newly Reported for the Bahama Islands.

AMARYLLIDACEAE: *Crinum asiaticum* L.: *Cerbin* 124 (NY, A, SRH) Clarence Town, Long Island. Cultivated and possibly escaped in moist places.

Zephyranthes citrina Baker: *Hill* 827 (A, SRH) Clarence Town, Long Island.

Zephyranthes puertoricensis Traub: *Hill* 836 (SRH) Hamilton's, Long Island. Also in cultivation from this population at NY.

AMARANTHACEAE: *Alternanthera brasiliana* (L.) Kuntze: *Cerbin* 127 (NY, A, SRH) Clements, Long Island. Determined by Mr. Kenneth Becker, NYBG.

CAESALPINIACEAE: *Bauhinia variegata* L.: *Hill* 566 (SRH) Nassau, New Providence. Commonly cultivated and escaped.

MALPIGHIACEAE: *Malpighia glabra* L.: *Cerbin* 1005 (NY, A, SRH) Matthew Town, Inagua. Cult. Cultivated and possibly escaped.

CACTACEAE: *Opuntia rubescens* (Salm-Dyck) Lemains: *Hill* 476 (SRH) Matthew Town, Inagua. Dooryard.

SOLANACEAE: *Datura inoxia* Mill.: *Hill* 850 (SRH) Clarence Town, Long Island. Roadside. Also *Nash and Taylor* 1357, formerly determined as *D. metel* L. but re-identified by H. N. Moldenke. Inagua.

IV. Rediscovery.

CYCADACEAE: *Zamia lucayana* Britton: *Hill* 828 (MO,

K, US, A, F, BM, TRIN, SRH, NY). Found in limestone and sand 100 yards from the sea, about five miles north of the type locality; Turtle Cove, Long Island. Formerly known only from the type collection "In a sandy coastal thicket Clarence Town, Long Island, only one plant found after a long search (*Britton and Millspaugh* 6271)" (Britton, 1907). This writer discovered an extensive colony with many old plants as well as a thriving understory of seedlings and hermit crabs which were feeding on the fleshy seed coats. Plants in the shade generally exhibited much longer leaves than those in sun, those specimens in shade agreeing more closely with the type. Male and female cones were collected, and living material is in cultivation at NYBG, Harvard, and the Fairchild Tropical Garden.

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